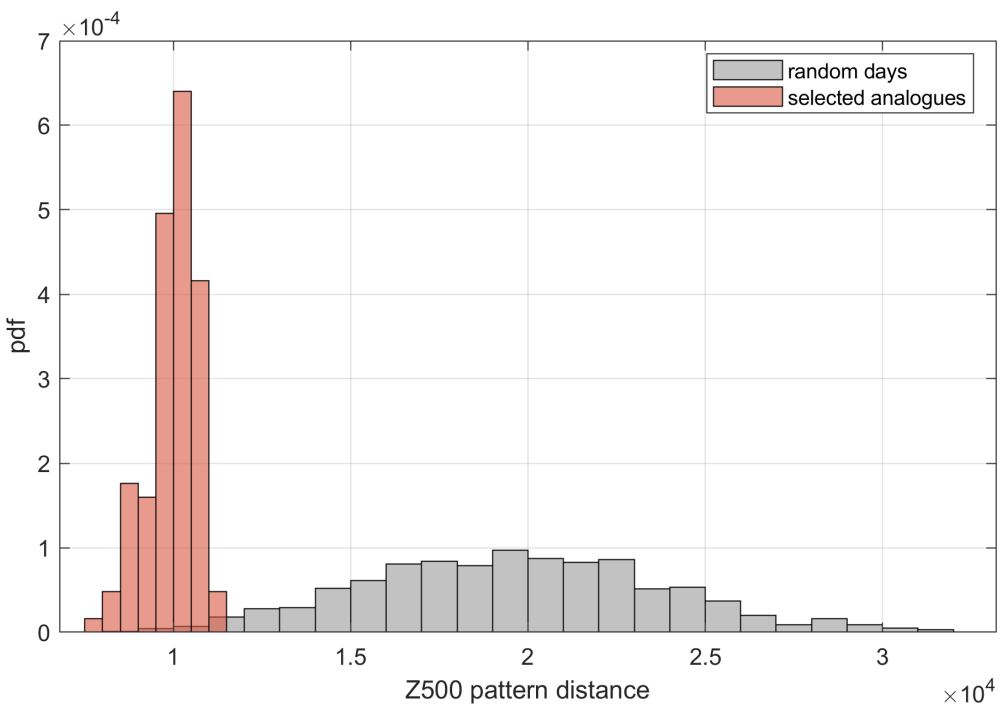


1 **Supplementary file**

2 **The June 2026 heatwave established a new benchmark for early-summer heat in**
3 **Germany**

4
5 **Monica Ionita¹** and Viorica Nagavciuc¹

6 ¹Alfred Wegener Institute Helmholtz Center for Polar and Marine Research



8
9 **Figure S1.** Analogue quality diagnostic. Probability density of the latitude-weighted Euclidean Z500 pattern
10 distances of the selected analogues (red) and of randomly drawn candidate days from the same ± 15 -day
11 calendar window (grey), pooled over the five heatwave days (25–29 June 2026).

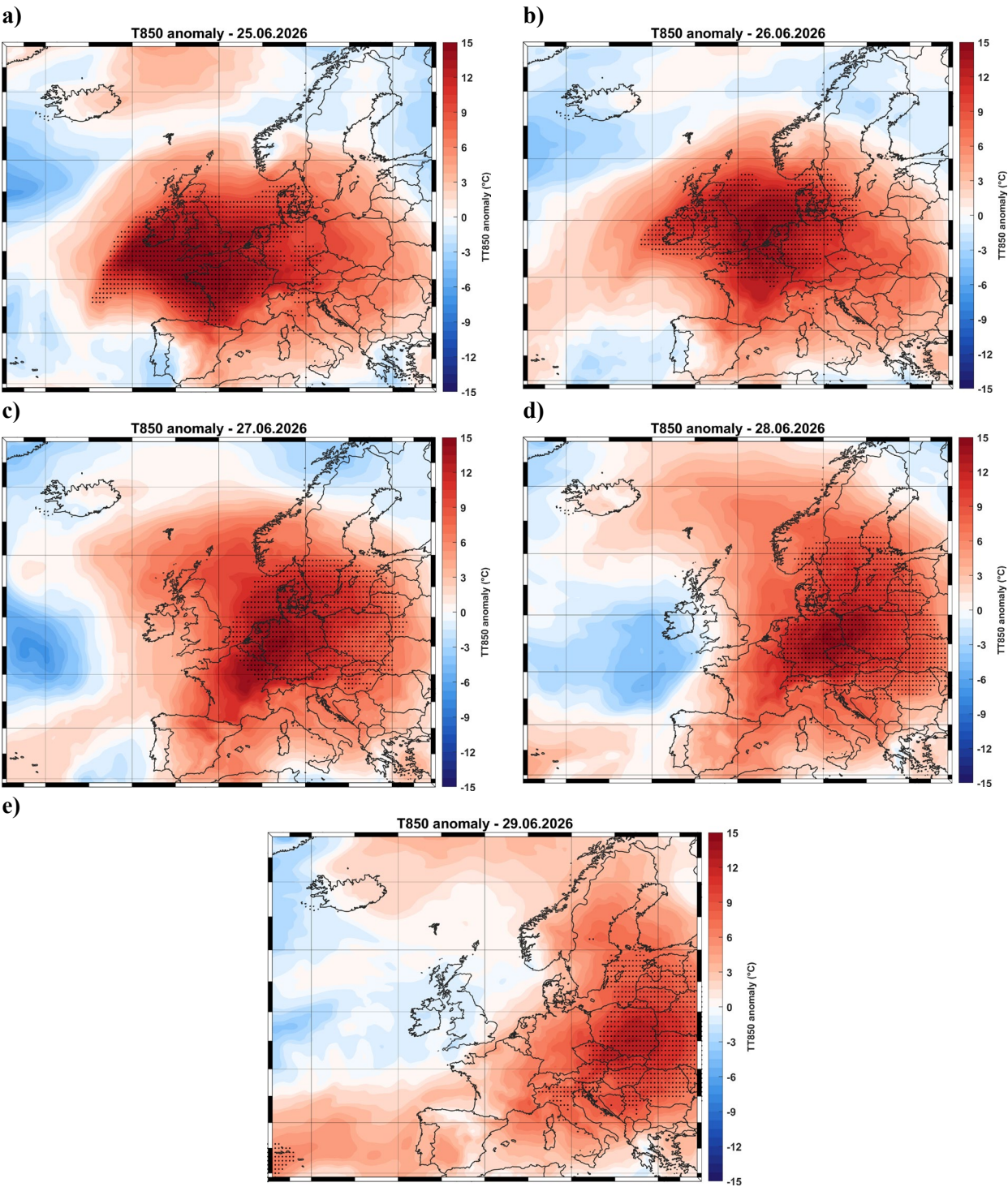


Figure S2. Daily 850 hPa temperature (T850) anomalies (shading, °C) relative to the 1971–2000 climatology for each of the five heatwave event days: a) 25th of June, b) 26th of June; c) 27th of June; d) 28th of June and e) 29th of June. Stippling denotes grid points where the T850 anomaly is the highest value on record for that calendar day since 1970.

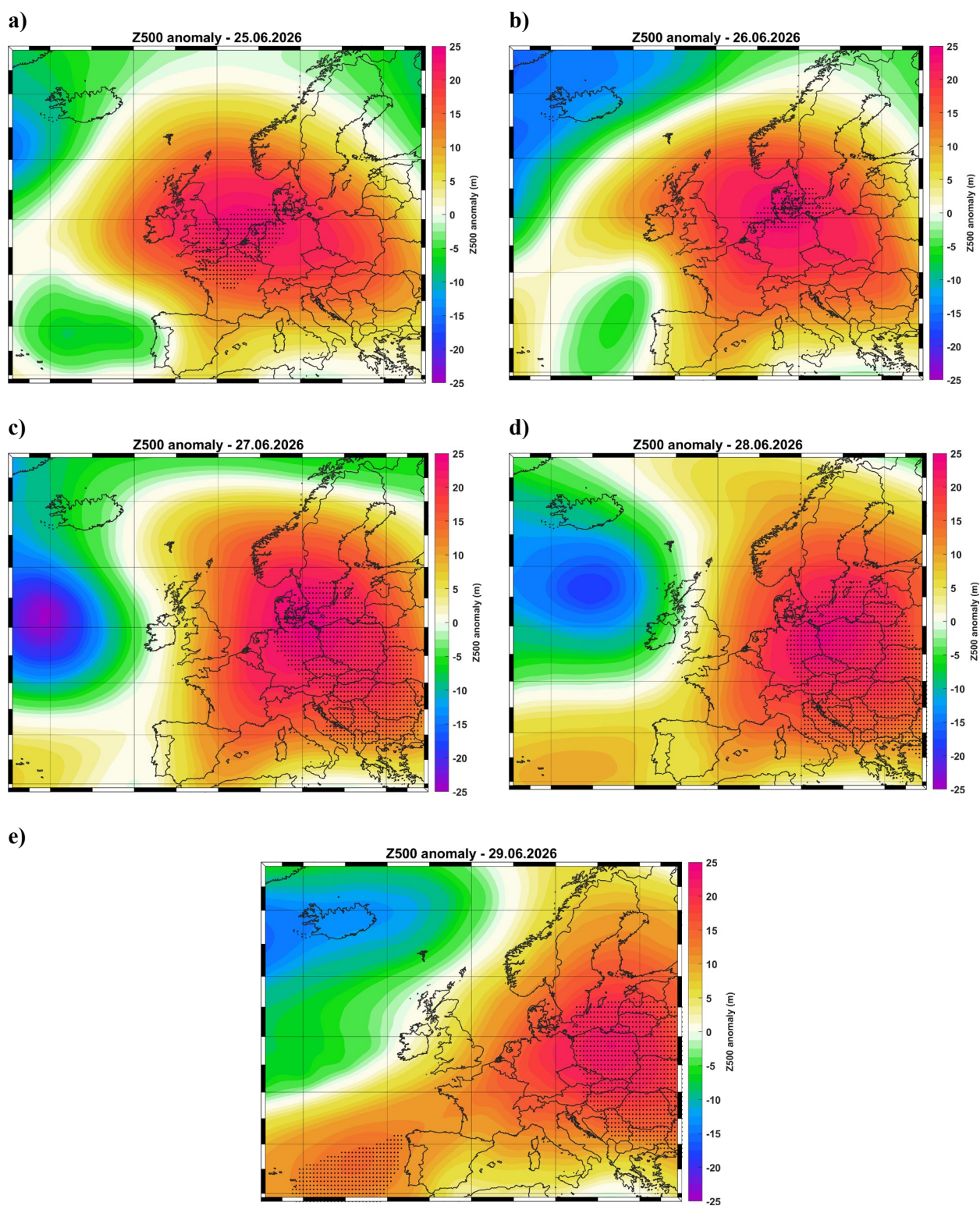


Figure S3. As Figure S2, but for 500 hPa geopotential height (Z500) anomalies (shading, m).

28

29

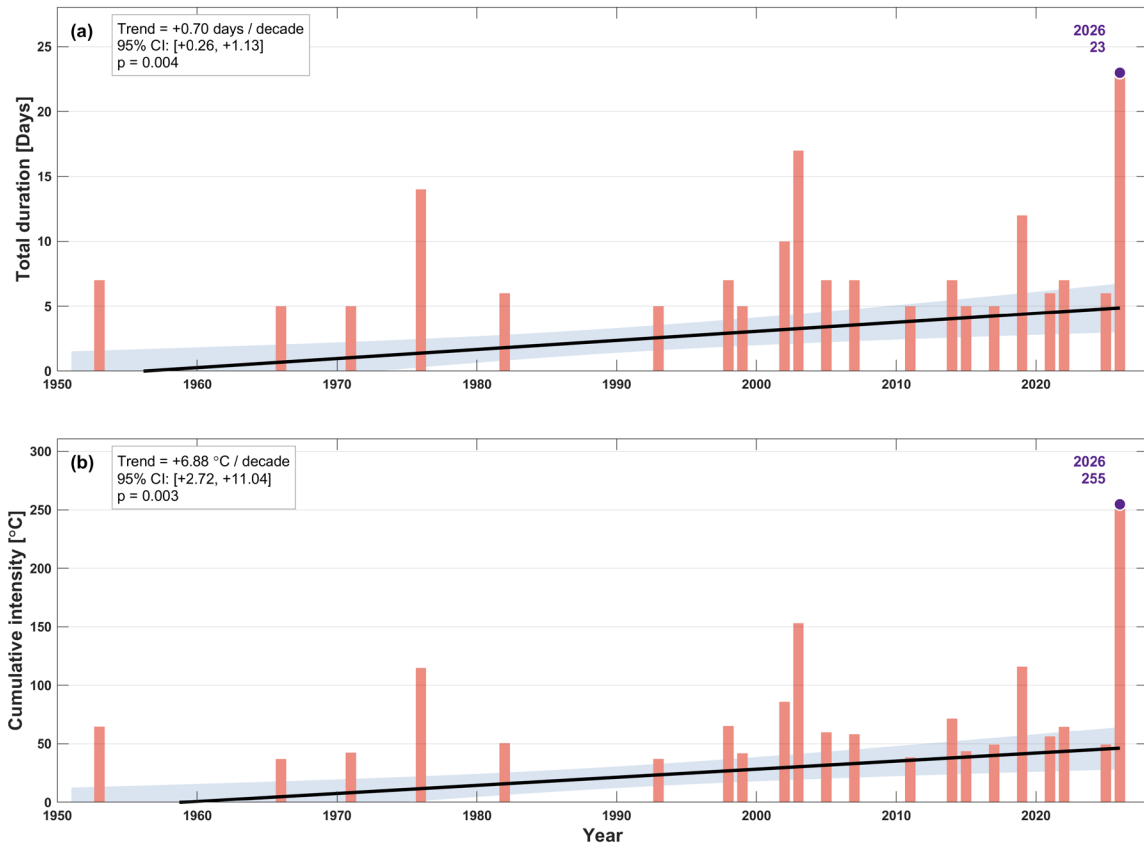


Figure S4. Baden-Württemberg average May – June time-series of: a) total heatwave duration (days) and b) cumulative heatwave intensity (°C, degree-days), with the trend line (black), its 95% confidence band, and the 2026 value highlighted.

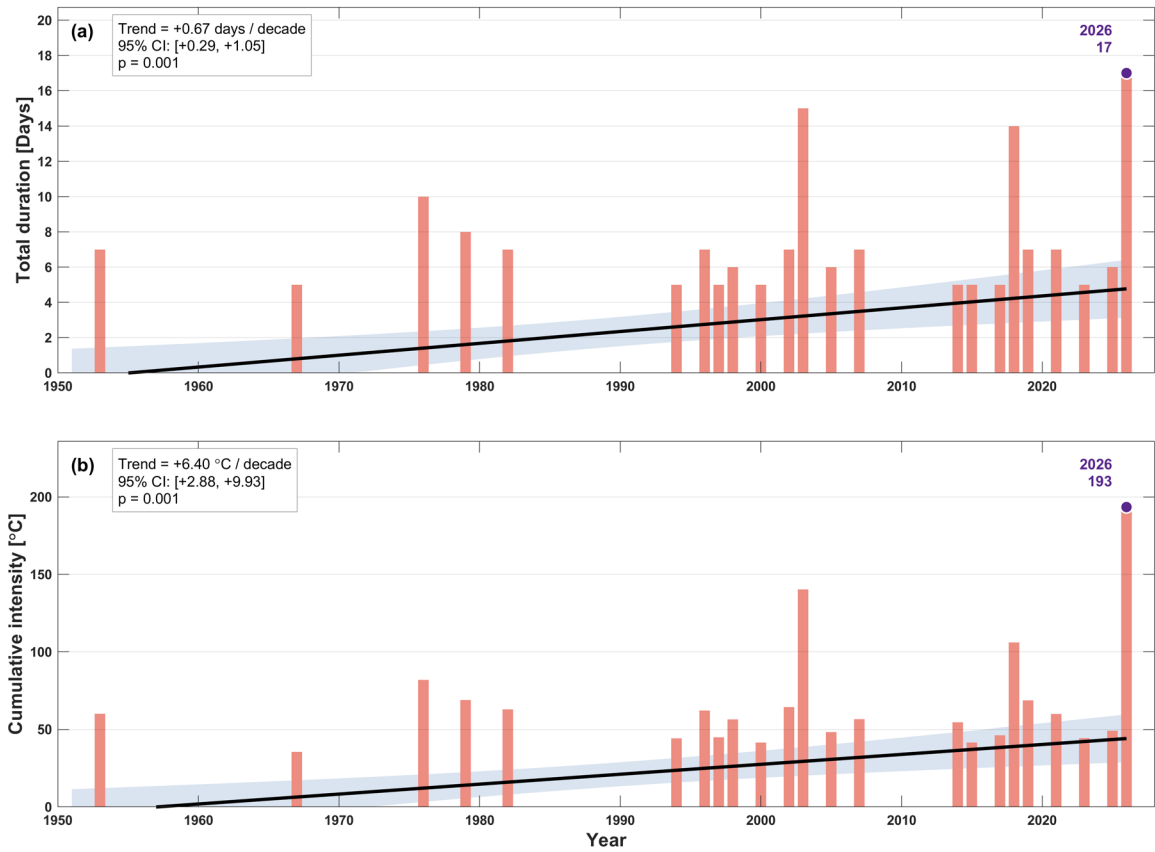


Figure S5. Bayern average May – June time-series of: a) total heatwave duration (days) and b) cumulative heatwave intensity (°C, degree-days), with the trend line (black), its 95% confidence band, and the 2026 value highlighted.